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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/100,838 06/19/98 MURARI

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SEED INTELLECTUAL PROPERTY LAW GROUP PLL
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SEATTLE WA 98104-7092

EXAMINER

KWOK, H

ART UNIT

PAPER NUMBER

2856

DATE MAILED:

04/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/100,838

Applicant(s)

Murari et al.

Examiner

H. Kwok

Group Art Unit

2856



☒ Responsive to communication(s) filed on Jan 16, 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-13 and 15-20 is/are pending in the application.

Of the above, claim(s) 8-11 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-7, 12, 13, and 15-20 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 16

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 12-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,864,063 (Otani et al.) in view of WO 96/39632 (Martin et al.).

Otani et al. discloses an electrostatic capacitive type acceleration sensor comprising, as illustrated in Figures 1-9, sensor unit 2 formed in a first chip of semiconductor material 4 for producing an electrical signal dependent on a movement of a sensing element including at least one movable microstructure 14 relative to a surface of the first chip wherein the sensing element 14 is formed on the chip; a hollow structure (as observed in the figure) formed by a second semiconductor chip 3 attached to the first chip encloses the sensitive element; a processing circuit 6 for precessing the electrical signal formed in the second chip and in electrical connection with the electrical signal produced by the sensing element. (See, column 3, line 10 to column 4, line 47). The only difference between the prior art and the claimed invention is the hollow structure includes a metal wall disposed on a surface of the first chip and being fixed to the second chip. Martin et al. discloses a package for sealing an integrated circuit die comprising, as illustrated in

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Figures 2 and 4, a first chip of semiconductor material 10; a sensing element 24 formed on the chip; a hollow structure 36 enclosing the sensing element; a metal wall 30 disposed on the chip; and a closure plate 32 made of metal or polymeric material is fixed to the metal wall. (See, pages 4-9). It would have been obvious to a person of ordinary skill in the art at the time of invention to have readily recognize the advantages and desirability of employing the hollow structure having a metal wall disposed on a surface of the first chip and being fixed to the second chip as suggested by Martin et al. to the device of Otani et al. since to enclose a sensing element is well known in the art to provide protection to the sensing element and to prevent external noises and particulates from interfering with the detected signal from the sensing element. (See, page 2 of Martin et al.).

With regards to claims 2-7, Otani et al. further discloses conductive pads for electrical connection to the processing circuit. (See, column 5, lines 13-22) while Martin et al. also further discloses ballbonds 16 and wirebonds 18 for connection to the sensing element for transmitting electrical signals to the processing circuit..

With regards to claims 12-13 and 15-20, the claims are commensurate in scope with claims 1-7 and are rejected for the same reasons as set forth above.

Response to Amendment

3. Applicant's arguments with respect to claims 1-7 and 12, 13 and 15-20 have been considered but are moot in view of the new ground(s) of rejection.

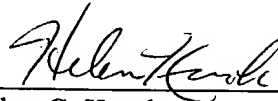
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Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CAR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CAR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen Kwok whose telephone number is (703) 308-8149.


Helen C. Kwok
Art Unit 2856

hck
April 9, 2001